



Applied Environmental Studies

Dalian American International School

Paper Recycling Program

Directed by:

Dr. Michael E. Baldwin

Edited by:

Recycling Paper Group

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I. Introduction

A. Background

Our research on paper recycling yielded a wealth of information on paper recycling in the United States. Data for other countries was not as organized or as easily found. For this reason most of our data is for the United States of America. In the US, paper makes up 29 percent of municipal solid waste (MSW), which is the largest component, making up more than 40% of the composition of landfill. Each year, over 2 billion books, 350 million magazines, and 24 billion newspapers are published.

B. Significant of Recycling

Recycling reduces the amount of waste take place in landfills, helping to prolong its lifetime. In the United States of America, 30% of the waste disposed is recovered and recycled, 50% is burned at combustion facilities, and the residual 55% is disposed of in landfills. Recycling paper reduces the amount of trees that are cut down.

Recycling one ton of paper would:

- Save enough 4000 kilowatts of energy to power the average American home for six months.
- Save 7,000 gallons of water.
- Save 3.3 cubic yards of landfill space.
- Save 17 trees.
- Save 380 gallons of oil.

C. Benefit

Recycling benefits variety ways.

- Creating Jobs—Recycling and reuse industry consist of approximately 56,000 establishments that employ over 1.1 million people in the United States of America.
- Saving Money—By diverting recyclable materials from the landfill, immediate economic benefits are produced through reduced disposal fees and the sale of recyclable materials.
- Retaining Local Employers—By collecting recyclable commodities, industries that need these materials remain in the region and may even expand their operations.
- Generating Tax Revenue—In 2005, South Carolina's recycling industry produced \$69 million in state tax revenue.
- Producing Economic Development Opportunities—Increased collection of materials attracts businesses that are interested in processing or using the materials.
- Reduce the need for new landfill.

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- Reduce the number of trees that are cut down—It has been estimated that recycling half the world’s paper would avoid the harvesting of 20 million acres (81,000 km²) of forestland.
- Supply valuable raw materials to the industry.
- Reduce the amount of incineration.
- Promote a healthy lifestyle.
- Create less greenhouse gas emissions.
- Extends the fiber supply and contributes to carbon sequestration

II. Basic Information

A. Paper recycled

There are several different types of paper that can be recycled. The color or amount of ink on the paper is irrelevant. Each collector of paper may have slightly varying specifications, but usually staples, paper clips, and rubber bands are acceptable in small amounts. Large clips, brads and binders usually are not acceptable. Papers with butter, jelly or cheese that may cause problems of the machine to function are not acceptable.

1. White Paper

Examples of white paper at your school are: copier paper, mimeograph paper, letterhead and plain paper faxes.

2. Colored Paper

Colored paper refers to the actual color of the sheet and includes any color. Like white paper, what is printed on the sheet is irrelevant.

3. Mixed Paper

Mixed Paper refers to about any kind of paper, including paperboard, paper bags, telephone books, etc.

4. Newspaper and Magazines

Glue-bound magazines are usually acceptable.

B. Preparation of Materials

The Recycling Paper Group needs 64 boxes. Boxes are basically settled nearby the door in order to minimum the distraction. The following is the number of boxes needed.

Number of Boxes Needed	Common Area	Office	Library	Computer Lab	Classrooms	Total
3rd Floor	1	6	0	0	13	20
2nd Floor	2	4	1	1	11	19
1st Floor	1	3	1	1	9	15

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Basement	1	0	0	0	9	10
Total	5	13	2	2	42	64

The following is the size of the boxes. The Recycling Paper Group would plan to buy Box A and Box B.

Box	Box Location	Size (Length×Width×Height)mm
A	Common Area, Library, Computer Lab	550×400×240
B	Classroom, Office	490×345×290

See reference Box in Fig.1.

C. Internal Collection Methods

The Recycling Paper Group is going to collect paper once a week on Thursday or Friday during environment class.

- Jenny Wang (Paper Work, such as Recycling Paper Prospectus, PowerPoint of meetings, notes taking, document storage, etc) will collect the paper in Basement and 1st Floor.
- Michael Chen (Diplomacy, includes talking to company, associate with other school, etc) will collect the paper in 2nd Floor.
- Vivian Wang (Advertisements, involve DAIS Live, etc) will collect the paper in 3rd Floor.

D. Storage Site

The Recycling Paper Group would store the paper in B19 and storeroom in basement. The following is the Administration approval.



**Administration Permission Slip
For Recycling Paper
For 2012-2013 Academic Year**

Dear Administrative officers,

The Recycling Paper Group from Environment Applied Study will start a recycling paper program, which needs storage rooms for the collection of paper. The Recycling Paper Group would like the administrative to authorize right of using the following place to Recycling Paper Group for the usage to store paper:

- B19

Thank you,
Recycling Paper Group
Jenny Wang, Michael Chen & Vivian Wang
Environment Applied Study

Name _____

Signature _____ Date _____

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E. Cost

Both Box A and B will be bought online. The reference box is shown in Fig.1.

Box	Number of Boxes	Unit Price	Total (Yuan)
A	9	39.9	359.1
B	55	35	1925
A+B	64	74.9	2284.1

F. Advertisement

There are four ways for advertising.

1. Email

The Recycling Paper Group will email teachers and students about the recycling program before start. The letter will be the following:

Honorable teachers, officers and esteemed students,

The Recycling Paper Group (Michael Chen, Jenny Wang & Vivian Wang) from Environment Applied Study Class is going to start a Recycling Paper Program. The Recycling Paper Group will settle boxes in soon. Here is what the Recycling Paper Group hopes you to do:

- Throw waste paper into the recycling boxes. (Don't throw any food, plastic, garbage, etc)
- Tear your name off from the paper that has confidential information (such as test scores and personal information).
- Focus on what you are doing while Recycling Paper Group come collecting the paper.

Thanks for your cooperation!

Sincerely,

Environmental Applied Study

Jenny Wang, Michael Chen & Vivian Wang

2. Posters

There are three location are suitable to put posters. One will be put on the front door, and the other two will be put on the walls on 2nd and 3rd floor. See reference poster in Fig.2.

3. DAIS live

The Recycling Paper Group is going to talk to Dr.Neuage if there is necessary to denounce students to avoid improper behaviors.

4. Signs

Settle a sign over each garbage can to remind students, teachers and staff to throw paper into recycling boxes. See reference sign in Fig.5.

III. Cooperation

A. Teachers and Staff

All teachers and staff are expected to do the following:

- Follow the School Recycling Plan and promote recycling practices.
- Ensure that students are following and practicing Recycling Rules.

B. Students

1. Suggested ways for students to get involve:

- Select student monitors and volunteers to oversee and empty recycle containers.
- Ask students to participate in a recycling poster contest.
- Initiate field trips to paper recycling factory.
- Set up a system that randomly awards students who get caught recycling.
- Organize curriculum for a special weeklong recycling and conservation program to be included in social studies, economics, and/or math classes.
- Provide community service credit hours for “Green Club” members who help with recycling before/after school hours.
- Promote pizza lunch for all who participate in the “Green Team”.
- Have students participate in creating large visual displays to record and communicate the results of recycling efforts on a regular basis.
- Distribute reusable water bottles to students and staff to promote drinking water as an alternative to sodas and to reduce bottle waste.
- Reinforce recycling with the use of recycle containers at sporting events and school assemblies.

2. All students are expected to sign the Students Permission Slip and turn in before the recycling program starts.

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Student Permission Slip For Recycling Paper For 2012-2013 Academic Year

Dear Students,

Dalian American International School recognizes the importance of creating a safe and healthy environment for all of the students. With this in mind, our school is planning to start a paper recycling program with the goal of reducing the amount of waste produced by our community. In order to make our environment healthier we are asking everyone to participate and agree to the following:

- Throw paper and cardboard into recycling box, separately from garbage, including: all white, colored, and glossy paper; any envelopes; smooth cardboard (small boxes, tubes, paper packaging); paper bags; pizza boxes (empty – no food scraps); newspapers, magazines, soft cover books, comic books, and catalogs; phone books; and corrugated cardboard (flattened boxes)
- Students tear their name off from the paper that has test score, or any personal information students do not want others to know.
- Students try their best to save paper and do not print unnecessary paper.

Notice: staples, paper clips, tape, or glues are acceptable. Spiral bindings, hardcover books, and soft paper (tissues, towels) are NOT acceptable.

Confidentiality is the discretion in keeping secret information. In order to protect students' personal information, we need students to tear their name off from any paper that has students grade, or personal information that do not want others to know. Students will be responsible for the paper they throw to recycle box. The school and Recycling Paper Committee reserve all the rights for the final inspection of the paper and will not be responsible for any issues that might happen.

Please sign the form below.

Thank you,
Recycling Paper Group
Jenny Wang, Michael Chen & Vivian Wang
Environment Applied Study

Student Name _____ Grade _____
Student Signature _____ Date _____

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D. Reclamation Depot

Closely contact with reclamation depot and ensure the paper would be sold out.

Unite	Contact Name	Phone Number	Email Address	Price (Yuan/Ton)	Minimum Required Collection	Address
Company	Mr. Wang (Mike)	15840891811	twcreative@hotmail.com			辽宁省 大连市 开发区 辽河西路73号 融通大厦 409室
Personal	Mr. Cui	13504095541		700		

IV. Evaluation and Monitoring

A. Benefits

Recycling Paper makes a profit for school, strengthens the awareness of responsibility for students and creates a healthier environment for everyone.

B. Monitoring

The Recycling Paper Group will have an End of Year Report annually, informing students, officers, teachers and leaders the weight of paper collect, profit and improvements. Dr. Baldwin and this Recycling Paper Prospectus will help the Recycling Paper Program continue. Administrative has the right to check on Recycling Paper Program progress.



Fig.1 Reference Box

Recycling Paper Program
by Paper Recycling Group



A recycling program is ready for you to check out!

If you have **any** waste paper that is **ready** to throw away, please **leave** them in the **paper recycling boxes**.

Please **don't** forget to **tear** our name **off** from the paper to **protect** our **personal information**.

When you refuse to reuse it's our Earth you abuse and less pollution is the best solution. Let's protect the Earth together and do the best we can to make our planet better!



Love Our Environment



*Recycling Paper Group.
Jenny Wang, Michael Chen & Yivi Bai.
Environmental Applied Study.*

<http://www.futureworld.com.au/ncct/ncct.htm>
<http://www.earthday.org/ncct/ncct.htm>
<http://www.earthday.org/ncct/ncct.htm>
<http://www.earthday.org/ncct/ncct.htm>

Fig.2 Poster



**Please
Recycle the Paper**

Fig.3 Sign

Contact us if there is any problem

Member Contact:

Michael Chen: michael.chen@daishuamei.org

Vivian Wang: vivian.wang@daishuamei.org

Instructor Contact:

Michael E Baldwin: michael.baldwin@daischina.org

School Contact:

The Huamei Academy at
Dalian American International School
2 Dianchi Road
Golden Pebble Beach
Dalian Development Area 116650
P.R. China
Tel: (86-411) 8757 2000
Fax: (86-411) 8791 5656
Mob: (86-186) 4112 5431
<http://www.daishuamei.org/>